

ABSTRACT

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2 Methods and systems for controlling certificate-based open payment transactions
3 involving a merchant and a customer utilizing various types of networks and terminals.
4 Prior to accessing a merchant POS terminal or, for example, a merchant website, a
5 customer obtains a certificate from a service provider (SP), such as a bank, certifying his
6 identification (ID) and his relevant financial information, in a form that is understandable
7 by the SP. The SP is capable of performing multiple functions. For example, the SP is
8 capable of acting as a certificate authority when it issues the customer's certificates, an
9 authenticator when it receives private-key encrypted certificates from the customers to be
10 decrypted using the corresponding public-key, and an authorizing authority when it
11 checks the value available in a customer's chosen payment account against the requested
12 purchase or transfer amount.